	Application No.	Applicant(s)
Notice of Allowability	09/768,747	DONALD J. KADYK
	Examiner	Art Unit
	Baoquoc N To	2162
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in to or other appropriate commun GHTS. This application is su	his application. If not included ication will be mailed in due course. THIS
1. This communication is responsive to <u>09/23/2004</u> .		
2. The allowed claim(s) is/are 8 and 12-39.		
3. \square The drawings filed on <u>24 January 2001</u> are accepted by the	e Examiner.	
 4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	been received. been received in Application	No
Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a ENT of this application.	reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXANes reason(s) why the oath or d	INER'S AMENDMENT or NOTICE OF leclaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.	
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or in	the Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the ne header according to 37 CFR	drawings in the front (not the back) of 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I	sit of BIOLOGICAL MATER FOR THE DEPOSIT OF BIOL	RIAL must be submitted. Note the OGICAL MATERIAL.
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) ▼ 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	6. ⊠ Interview Sun Paper No./M	rmal Patent Application (PTO-152) nmary (PTO-413), ail Date mendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's S 9. ☐ Other	JEAN M. CORRIELUS PRIMARY EXAMINER

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DETAILED ACTION

1. Claims 1-7 and 9-11 are canceled in the present amendment and previous amendment filed on 09/23/04. Claims 8, 12 and 13-39 are pending in this application.

Allowable Subject Matter

2. Claims 8, 12 and 13-39 are allowed.

As to claim 12, none of the know prior art neither alone or incombination teach or suggests "an act of sending a plurality of update notification to one or more client over an unreliable communication channel without requesting or receiving acknowledgment of receipt of the update notification by the one or more clients, each update notification including (1) at least one of the plurality of changes and (ii) at least one of the plurality of token, the at least one of the plurality of tokens corresponding to the at least one of the plurality of changes; an act of receiving a plurality of token back from the one or more clients; an act of interpreting one or more tokens that were sent to the one or more clients but that were not received back from the one or more clients as indication that one or more changes are missing from the one or more clients; an act of sending a list of one or more missing tokens to the one or more clients missing the one or more changes, the list identifying one or more tokens that were sent to the one or more clients but that were not received back; receiving a request from the one or more clients to resend the one or more missing tokens and corresponding changes; and an act of resending the one or more missing tokens and corresponding changes to the one or more requesting clients" in conjunction with an act of making a plurality of changes in

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the server data; and an act of generating a plurality of tokens identifying each of the plurality of changes in the server data.

Claims 8 and 13-18 are depended on claim 12, therefore they are allowed under the same reason.

As to claim 19, none of the known prior art made of record alone or incombination neither teach or suggest "a step for providing, over an unreliable communication channel, a plurality of notification to the one or more message clients without requesting or receiving acknowledgment of receipt of the notifications including (i) a plurality of changes to the data stored at the message server, and (ii) a plurality of tokens identifying each of the plurality of changes; a step for determining whether or not the one or more message clients are missing any of the plurality of notifications based on whether or not the one or more message clients can provide back each of the plurality of tokens identifying each of the plurality of changes; and act of sending a list identifying missing notification to the one or more corresponding message clients; receiving a request from the one or more message clients to resend the on or more missing notifications; and an act of resending the one or more missing notification to the one or more requesting message clients."

Claims 20-25 are depended on independent 19, therefore, they are allowed under same reason.

As to claim 26, none of the known prior art alone or incombination neither teach or suggest "sending a plurality of notification to the one or more message clients over the unreliable communication channel without requesting or receiving acknowledgment

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of receipt of the notification by the one or more message clients, each notification including (ii) at least one of the plurality of tokens, the at least one of the plurality of tokens corresponding to the at least one of the plurality of changes; receiving a plurality of tokens back from the one or more message clients; interpreting one or more tokens that were sent to the one or more message clients but not received back from the one or more message clients as indicate that one or more changes are missing from the one or more message clients; an act of sending a list one or more missing tokens to the one or more message clients missing tokens to the one or more message clients missing the one or more changes, the list identifying one or more tokens that were sent to the one or more message clients but that were not received back; receiving a request from the one or more message clients to resend the one or more missing tokens and corresponding changes; and resending the one or more missing changes to the one or more message clients" and in conjunction with "a message server storing data; one or more message clients storing data; un reliable communication channel at least intermittently connecting the message server and the one or more message clients; a and processor means for performing the acts of: making a plurality of changes in the message server data; generating a plurality of tokens identifying each of the plurality of changes in the message server data."

Claims 27-32 are dependent claims, which depended on claim 26, therefore, they are allowed under the same reason.

As to claim 33, non of the known prior art made of record alone or incombination neither teach or suggest "an act sending plurality of update notifications to the one or

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more clients over an unreliable communication channel without requesting or receiving acknowledgement of receipt of the update notification including (i) at least one of the plurality of the changes and (ii) at least one of the plurality of token, the at least one of the plurality of tokens corresponding to the at least one of the plurality of changes; an act of receiving a plurality of token back from the one or more clients; an act of interpreting one or more tokens that were sent to the one or more clients but that were not received back from the one or more clients as indications that one or more changes are missing from the one or more clients; and an act of sending a list of one or more tokens to the one more clients missing the one or more changes, the list identifying one or more tokens that were sent to the one or more clients but that were not received back; receiving a request from the one or more clients to resend the one or more missing tokens and corresponding changes; and an act of resending the one or more missing tokens and corresponding changes to the one or more requesting clients" and in conjunction with "an act of making a plurality of changes in the server data; and an act of generating a plurality of tokens of tokens identifying each of the plurality of changes in the server data."

Claims 34-39 are pending on independent claim 33, therefore, they are allowed under the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hanko et al. (US. Patent No. 6,694,379 B1) Patent date: 02/17/2004.

Chintada et al. (US. Patent No. 6,629,261 B1) Patent date: 09/30/2003.

LaRue et al. (US. Patent No. 10/26/2004 B1) Patent date: 10/26/2004.

Isaacs et al. (Pub. No. US. 2002/0026483 A1) Pub. Date: 02/28/2002.

Ben Li (RELIABLE MULTICAST TRANSMISSION USING FORWARD ERROR CORRECTION AND AUTOMATIC RETRANSMISSION REQUESTSS), Canadian Conference on Electrical and Computer Engineering, 2001, page 1145-1150.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231.

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The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To Nov 09, 2004

JEAN CORRIELUS PRIMARY EXAMINER